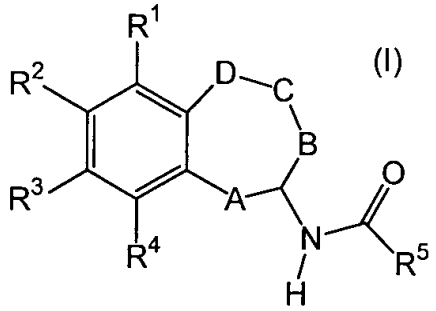
We claim:

1. An acylated 6,7,8,9-tetrahydro-5H-benzocycloheptenyl amine according to the general formula (I) in any of its stereoisomeric forms or a mixture thereof in any ratio or a pharmaceutically acceptable salt thereof



wherein

R^1 and R^4 are independently from each other selected from the group consisting of:

H; unsubstituted and at least monosubstituted C_1-C_{10}-alkyl, C_2-C_{10}-alkenyl and C_2-C_{10}-alkynyl, the substituents of which are selected from the group consisting of F, OH, C_1-C_8-alkoxy, (C_1-C_8-alkyl)mercapto, CN, $COOR^6$, $CONR^7R^8$, and unsubstituted and at least monosubstituted phenyl and heteroaryl, the substituents of which are selected from the group consisting of halogens, pseudohalogens, C_1-C_3-alkyl, C_1-C_3-alkoxy and CF_3; unsubstituted and at least monosubstituted phenyl and heteroaryl, the substituents of which are selected from the group consisting of halogens, pseudohalogens, C_1-C_3-alkyl, C_1-C_3-alkoxy and CF_3; R^9CO; $CONR^{10}R^{11}$; $COOR^{12}$; CF_3; halogens; pseudohalogens; $NR^{13}R^{14}$; OR^{15}; $S(O)_mR^{16}$; $SO_2NR^{17}R^{18}$; and NO_2;

R^2 and R^3 are independently from each other selected from the group consisting of:

H; halogens; pseudohalogens; unsubstituted and at least monosubstituted C_1-C_{10}-alkyl, the substituents of which are selected from the group consisting of OH, phenyl, and heteroaryl; OH; C_1-C_{10}-alkoxy; phenoxy; $S(O)_mR^{19}$; CF_3; CN; NO_2; (C_1-C_{10}-alkyl)amino; di(C_1-C_{10}-alkyl)amino; (C_1-

C_6-alkyl)-CONH-; unsubstituted and at least monosubstituted phenyl-CONH- and phenyl-SO_2-O-, the substituents of which are selected from the group consisting of halogens, pseudohalogens, CH_3 and methoxy; (C_1-C_6-alkyl)SO_2-O-; unsubstituted and at least monosubstituted (C_1-C_6-alkyl)CO, the substituents of which are selected from the group consisting of F, di(C_1-C_3-alkyl)amino, pyrrolidinyl and piperidinyl; and phenyl-CO, the phenyl part of which can be substituted by one or more substituents from the group consisting of C_1-C_3-alkyl, halogens and methoxy;

A is selected from the group consisting of CH_2, CHOH and CH-(C_1-C_3-alkyl);

B is selected from the group consisting of CH_2 and CH-(C_1-C_3-alkyl);

C independently has the same meaning as B;

D independently has the same meaning as B;

R^5 is a group Ar or a group Hetar both of which can be unsubstituted or carry one or more substituents selected from the group consisting of: halogens; pseudohalogens; NH_2; unsubstituted and at least monosubstituted C_1-C_{10}-alkyl, C_2-C_{10}-alkenyl, C_2-C_{10}-alkynyl, C_1-C_{10}-alkoxy, (C_1-C_{10}-alkyl)amino, and di(C_1-C_{10}-alkyl)amino, the substituents of which are selected from the group consisting of F, OH, C_1-C_8-alkoxy, aryloxy, (C_1-C_8-alkyl)mercapto, NH_2, (C_1-C_8-alkyl)amino, and di(C_1-C_8-alkyl)amino; C_3-C_5-alkandiyl; phenyl; heteroaryl; aryl- or heteroaryl-substituted C_1-C_4-alkyl; CF_3; NO_2; OH; phenoxy; benzyloxy; (C_1-C_{10}-alkyl)COO; $S(O)_mR^{20}$; SH; phenylamino; benzylamino; (C_1-C_{10}-alkyl)-CONH-; (C_1-C_{10}-alkyl)-CON(C_1-C_4-alkyl)-; phenyl-CONH-; phenyl-CON(C_1-C_4-alkyl)-; heteroaryl-CONH-; heteroaryl-CON(C_1-C_4-alkyl)-; (C_1-C_{10}-alkyl)-CO; phenyl-CO; heteroaryl-CO; CF_3-CO; -OCH_2O-; -OCF_2O-; -OCH_2CH_2O-; -CH_2CH_2O-; $COOR^{21}$; $CONR^{22}R^{23}$; $CNH(NH_2)$; $SO_2NR^{24}R^{25}$; $R^{26}O_2NH$-; $R^{27}SO_2N$(C_1-C_6-alkyl)-; and saturated and at least monounsaturated aliphatic, mononuclear 5- to 7-membered heterocycles containing 1 to 3 heteroatoms selected from the group consisting of N, O, and S, which heterocycles can be substituted

by one or more substituents selected from the group consisting of halogens, C_1-C_3-alkyl, C_1-C_3-alkoxy, OH, oxo and CF_3, and wherein said heterocycles can optionally be condensed to the said group Ar or the said group Hetar; and wherein all aryl, heteroaryl, phenyl, aryl-containing, heteroaryl-containing and phenyl-containing groups, which are optionally present in the said substituents of the said group Ar or the said group Hetar, can be substituted by one or more substituents selected from the group consisting of halogens, pseudohalogens, C_1-C_3-alkyl, OH, C_1-C_3-alkoxy, and CF_3;

R^6 is selected from the group consisting of:

H; C_1-C_{10}-alkyl, which can be substituted by one or more substituents selected from the group consisting of F, C_1-C_8-alkoxy, and di(C_1-C_8-alkyl)amino; aryl-(C_1-C_4-alkyl) and heteroaryl-(C_1-C_4-alkyl), which can be substituted by one or more substituents selected from the group consisting of halogens, C_1-C_4-alkoxy, and di(C_1-C_6-alkyl)amino;

R^7 is selected from the group consisting of:

H; C_1-C_{10}-alkyl which can be substituted by one or more substituents selected from the group consisting of F, C_1-C_8-alkoxy, di(C_1-C_8-alkyl)amino and phenyl; phenyl; indanyl; and heteroaryl; and wherein each of the aforementioned aromatic groups can be unsubstituted or carry one or more substituents from the group consisting of halogens, pseudohalogens, C_1-C_3-alkyl, C_1-C_3-alkoxy and CF_3;

R^8 is H or C_1-C_{10}-alkyl;

R^9 is selected from the group consisting of: C_1-C_{10}-alkyl which can be unsubstituted or carry one or more substituents from the group consisting of: F, (C_1-C_4)-alkoxy, di(C_1-C_3-alkyl)amino; and unsubstituted and at least monosubstituted phenyl and heteroaryl, the substituents of which are

selected from the group consisting of C_1-C_3-alkyl, C_1-C_3-alkoxy, halogens, pseudohalogens, and CF_3;

R^{10} independently has the same meaning as R^7;

R^{11} independently has the same meaning as R^8;

R^{12} independently has the same meaning as R^6;

R^{13} is selected from the group consisting of: H; C_1-C_6-alkyl; unsubstituted and substituted phenyl, benzyl, heteroaryl, (C_1-C_6-alkyl)-CO, phenyl-CO, and heteroaryl-CO, the substituents of which are selected from the group consisting of halogens, pseudohalogens, C_1-C_3-alkyl, C_1-C_3-alkoxy, and CF_3, and wherein one or more of these substituents can be present;

R^{14} independently has the same meaning as R^{13}

R^{15} is selected from the group consisting of: H; C_1-C_{10}-alkyl; (C_1-C_3-alkoxy)-C_1-C_3-alkyl; and substituted and unsubstituted benzyl, phenyl and heteroaryl, the substituents of which are selected from the group consisting of halogens, pseudohalogens, C_1-C_3-alkyl, C_1-C_3-alkoxy, and CF_3, and wherein one or more of these substituents can be present;

R^{16} is selected from the group consisting of: C_1-C_{10}-alkyl which can be substituted by one or more substituents selected from the group consisting of F, OH, C_1-C_8-alkoxy, aryloxy, (C_1-C_8-alkyl)mercapto, (C_1-C_8-alkyl)amino and di(C_1-C_8-alkyl)amino; CF_3; and substituted and unsubstituted phenyl and heteroaryl, the substituents of which are selected from the group consisting of halogens, pseudohalogens, C_1-C_3-alkyl, C_1-C_3-alkoxy and CF_3, and wherein one or more of these substituents can be present;

R^{17} independently has the same meaning as R^7;

R^{18} independently has the same meaning as R^8;

R^{19} independently has the same meaning as R^{16};

R^{20} independently has the same meaning as R^{16};

R^{21} independently has the same meaning as R^{6};

R^{22} independently has the same meaning as R^{7};

R^{23} independently has the same meaning as R^{8};

R^{24} independently has the same meaning as R^{7};

R^{25} independently has the same meaning as R^{8};

R^{26} independently has the same meaning as R^{16};

R^{27} independently has the same meaning as R^{16};

heteroaryl is a 5 to 10-membered, aromatic, mono- or bicyclic heterocycle containing one or more heteroatoms selected from the group consisting of N, O, and S;

the group Hetar is a 5 to 10-membered, aromatic, mono- or bicyclic heterocycle containing one or more heteroatoms selected from the group consisting of N, O, and S;

aryl is phenyl, naphth- 1-yl or naphth-2-yl;

the group Ar is phenyl, naphth-1-yl or naphth-2-yl; and

m is 0, 1 or 2.

2. An acylated 6,7,8,9-tetrahydro-5H-benzocycloheptenyl amine in any of its stereoisomeric forms or a mixture thereof in any ratio or a pharmaceutically acceptable salt thereof according to claim 1, wherein in the formula (I)

R^1 is selected from the group consisting of: H; C_1-C_4-alkyl; C_1-C_4-alkoxy; CF_3; halogens; pseudohalogens; (C_1-C_4-alkyl)-$S(O)_m$-; and unsubstituted and at least monosubstituted phenyl and heteroaryl, the substituents of which are selected from the group consisting of halogens, pseudohalogens, C_1-C_3-alkyl, C_1-C_3-alkoxy and CF_3, and wherein heteroaryl is selected from the

group consisting of 5- and 6-membered heterocycles containing one or more heteroatoms from the group consisting of N, O, and S;

R^2 and R^3 are independently from each other selected from the group consisting of:

H; halogens; pseudohalogens; and C_1-C_3-alkyl;

R^4 independently has the same meaning as R^1;

A is selected from the group consisting of CH_2 and CHOH;

B, C and D are independently from each other selected from the group consisting of CH_2 and CH-CH_3;

R^5 is a group Ar or a group Hetar both of which can be unsubstituted or carry one or more substituents selected from the group consisting of: halogens; CN; NH_2; unsubstituted and at least monosubstituted C_1-C_8-alkyl, C_2-C_8-alkenyl, C_2-C_8-alkynyl, C_1-C_8-alkoxy, (C_1-C_8-alkyl)amino, and di(C_1-C_8-alkyl)amino, the substituents of which are selected from the group consisting of F, C_1-C_6-alkoxy, phenoxy, (C_1-C_6-alkyl)mercapto, NH_2, (C_1-C_6-alkyl)amino, and di(C_1-C_6-alkyl)amino; C_3-C_5-alkandiyl; phenyl; heteroaryl; phenyl- or heteroaryl-substituted C_1-C_2-alkyl; CF_3; OH; phenoxy; benzyloxy; (C_1-C_6-alkyl)COO; $S(O)_m$(C_1-C_6)-alkyl; $S(O)_m$-phenyl; $S(O)_m$-heteroaryl; SH; phenylamino; benzylamino; (C_1-C_6-alkyl)-CONH-; (C_1-C_6-alkyl)-CON(C_1-C_4-alkyl)-; phenyl-CONH-; phenyl-CON(C_1-C_4-alkyl)-; heteroaryl-CONH-; heteroaryl-CON(C_1-C_4-alkyl)-; (C_1-C_6-alkyl)-CO; phenyl-CO; heteroaryl-CO; CF_3-CO; -OCH_2O-; -OCF_2O-; -OCH_2CH_2O-, -CH_2CH_2O-; COO(C_1-C_6-alkyl); -$CONH_2$; -CONH(C_1-C_6-alkyl); -CON(di(C_1-C_6-alkyl)); CNH(NH_2); -SO_2NH_2; -SO_2NH(C_1-C_6-alkyl); -SO_2NH(phenyl); -SO_2N(di(C_1-C_6-alkyl)); (C_1-C_6-alkyl)SO_2NH-; (C_1-C_6-alkyl)SO_2N(C_1-C_6-alkyl)-; phenyl-SO_2NH-; phenyl-SO_2N(C_1-C_6-alkyl)-; heteroaryl-SO_2NH-; heteroaryl-SO_2N(C_1-C_6-alkyl)-; and saturated and at least monounsaturated aliphatic, mononuclear 5- to 7-membered heterocycles containing 1 to 3 heteroatoms selected from the group consisting of N,

O, and S, which heterocycles can be substituted by one or more substituents selected from the group consisting of halogens, C_1-C_3-alkyl, C_1-C_3-alkoxy, OH, oxo and CF_3, and wherein said heterocycles can optionally be condensed to the said group Ar or the said group Hetar; and wherein all heteroaryl, phenyl, heteroaryl-containing and phenyl-containing groups, which are optionally present in the said substituents of the said group Ar or the said group Hetar, can be substituted by one or more substituents selected from the group consisting of halogens, pseudohalogens, C_1-C_3-alkyl, OH, C_1-C_3-alkoxy, and CF_3;

heteroaryl is a 5- to 10-membered, aromatic, mono- or bicyclic heterocycle containing one or more heteroatoms selected from the group consisting of N, O, and S;

the group Hetar is a 5- to 10-membered, aromatic, mono- or bicyclic heterocycle containing one or more heteroatoms selected from the group consisting of N, O, and S;

the group Ar is phenyl, naphth-1-yl or naphth-2-yl; and

m is 0 or 2.

3. An acylated 6,7,8,9-tetrahydro-5H-benzocycloheptenyl amine in any of its stereoisomeric forms or a mixture thereof in any ratio or a pharmaceutically acceptable salt thereof according to claim 1, wherein in the formula (I)

R^1 is H, halogen or C_1-C_4-alkyl;

R^2 and R^3 are each H;

R^4 independently has the same meaning as R^1;

A, B and C are each CH_2;

D is selected from the group consisting of CH_2 and CH-CH_3;

R^5 is phenyl or a group Hetar both of which can be unsubstituted or carry one or more substituents selected from the group consisting of: halogens; CN; NH_2; unsubstituted and at least

monosubstituted C_1-C_6-alkyl, C_2-C_6-alkenyl, C_2-C_6-alkynyl, C_1-C_3-alkoxy, (C_1-C_4-alkyl)amino, di(C_1-C_4-alkyl)amino, the substituents of which are selected from the group consisting of F, C_1-C_3-alkoxy, (C_1-C_3-alkyl)mercapto, and NH_2; C_3-C_5-alkandiyl; phenyl; heteroaryl; phenyl- or heteroaryl-substituted C_1-C_2-alkyl; CF_3; OH; (C_1-C_4-alkyl)COO; $S(O)_m$(C_1-C_4)-alkyl; (C_1-C_4-alkyl)-CONH-; (C_1-C_4-alkyl)-CON(C_1-C_4-alkyl)-; (C_1-C_4-alkyl)-CO; phenyl-CO; heteroaryl-CO; CF_3-CO; -OCH_2O-; -OCF_2O-; -OCH_2CH_2O-; -CH_2CH_2O-; COO(C_1-C_6-alkyl); -$CONH_2$; -CONH(C_1-C_4-alkyl); -CON(di(C_1-C_4-alkyl)); CNH(NH_2); -SO_2NH_2; -SO_2NH(C_1-C_4-alkyl); -SO_2NH(phenyl); -SO_2N(di(C_1.C_4-alkyl)); (C_1-C_4-alkyl)SO_2NH-; (C_1-C_4-alkyl)SO_2N(C_1-C_4-alkyl)-; and saturated and at least monounsaturated aliphatic, mononuclear 5- to 7-membered heterocycles containing 1 to 3 heteroatoms selected from the group consisting of N, O, and S, which heterocycles can be substituted by one or more substituents selected from the group consisting of halogens, C_1-C_3-alkyl, C_1-C_3-alkoxy, OH, oxo and CF_3, and wherein said heterocycles can optionally be condensed to the said phenyl or the said group Hetar; and wherein all heteroaryl, phenyl, heteroaryl-containing and phenyl-containing groups, which are optionally present in the said substituents of the said phenyl or the said group Hetar, can be substituted by one or more substituents selected from the group consisting of halogens, pseudohalogens, C_1-C_3-alkyl, OH, C_1-C_3-alkoxy, and CF_3;

heteroaryl is a 5- to 10-membered, aromatic, mono- or bicyclic heterocycle containing one, two or three heteroatoms selected from the group consisting of N, O, and S;

the group Hetar is a 5- to 10-membered, aromatic, mono- or bicyclic heterocycle containing one, two or three heteroatoms selected from the group consisting of N, O, and S; and

m is 0 or 2.

4. An acylated 6,7,8,9-tetrahydro-5H-benzocycloheptenyl amine in any of its stereoisomeric forms or a mixture thereof in any ratio or a pharmaceutically acceptable salt thereof according to claim 1, wherein in the formula (I)

R^1 is H, halogen or C_1-C_4-alkyl;

R^2 and R^3 are each H;

R^4 independently has the same meaning as R^1;

A, B and C are each CH_2;

D is selected from the group consisting of CH_2 and CH-CH_3;

R^5 is phenyl or a group Hetar both of which can be unsubstituted or carry one or more substituents selected from the group consisting of: F; Cl; Br; C_1-C_3-alkyl; C_1-C_3-alkoxymethyl; 2-amino-3,3,3-trifluoro-propyl-; CF_3; C_3-C_5-alkandiyl; phenyl; heteroaryl; benzyl; heteroaryl-methyl; OH; C_1-C_3-alkoxy; phenoxy; trifluoromethoxy; 2,2,2-trifluoroethoxy; (C_1-C_4-alkyl)COO; (C_1-C_3-alkyl)mercapto; phenylmercapto; (C_1-C_3-alkyl)sulfonyl; phenylsulfonyl; NH_2; (C_1-C_4-alkyl)amino; di(C_1-C_4-alkyl)amino; (C_1-C_3-alkyl)-CONH-; (C_1-C_3-alkyl)-SO_2NH-; (C_1-C_3-alkyl)-CO; phenyl-CO; -OCH_2O-; -OCF_2O-; -CH_2CH_2O-; COO(C_1-C_4-alkyl); -$CONH_2$; -CONH(C_1-C_4-alkyl); -CON(di(C_1-C_4-alkyl)); CN; -SO_2NH_2; -SO_2NH(C_1-C_4-alkyl); -SO_2N(di(C_1-C_4-alkyl)); pyrrolidinyl; piperidinyl; morpholinyl; and thiomorpholinyl; and wherein all heteroaryl, phenyl, heteroaryl-containing and phenyl-containing groups, which are optionally present in the said substituents of the said phenyl or the said group Hetar, can be substituted by one or more substituents selected from the group consisting of halogens, pseudohalogens, C_1-C_3-alkyl, OH, C_1-C_3-alkoxy, and CF_3;

heteroaryl is selected from the group consisting of: furyl, pyrrolyl, thienyl, thiazolyl, isothiazolyl, oxazolyl, isoxazolyl, pyrazolyl, imidazolyl, pyridazinyl, pyrazinyl, pyridyl, pyrimidinyl,

benzoimidazolyl, benzothiazolyl, benzoxazolyl, quinolinyl, isoquinolinyl, quinoxalinyl, quinazolyl, indolyl, benzofuranyl, benzothiophenyl, and indazolyl;

the group Hetar is selected from the group consisting of: furyl, pyrrolyl, thienyl, thiazolyl, isothiazolyl, oxazolyl, isoxazolyl, pyrazolyl, imidazolyl, pyridazinyl, pyrazinyl, pyridyl, pyrimidinyl, benzoimidazolyl, benzthiazolyl, benzoxazolyl, quinolinyl, isoquinolinyl, quinoxalinyl, quinazolyl, indolyl, benzofuranyl, benzothiophenyl, and indazolyl.

5. An acylated 6,7,8,9-tetrahydro-5H-benzocycloheptenyl amine in any of its stereoisomeric forms or a mixture thereof in any ratio or a pharmaceutically acceptable salt thereof according to claim 1, wherein in the formula (I)

R^1 is H, halogen or C_1-C_4-alkyl;

R^2 and R^3 are each H;

R^4 independently has the same meaning as R^1;

A, B and C are each CH_2;

D is selected from the group consisting of CH_2 and $CH\text{-}CH_3$;

R^5 is selected from the group consisting of: 4-fluorophenyl, 4-chlorophenyl, 4-bromophenyl, 4-(C_1-C_3-alkoxy)-phenyl, 4-trifluoromethoxyphenyl, 2-bromo-4-fluorophenyl, 2-chloro-4-fluorophenyl, 3,4-dimethylphenyl, 2,4-dimethylphenyl, 4-chloro-2-methylphenyl, 2-hydroxy-4-methylphenyl, 2-hydroxy-4-ethoxyphenyl, 2-methoxy-4-methylphenyl, 4-phenoxyphenyl, 3-fluoro-4-methylphenyl, benzo[1,3]dioxol-5-yl, 2,2-difluoro-benzo[1,3]dioxol-5-yl, 2,3-dihydrobenzofuran-5-yl, 1-(4-chloro-phenyl)-5-trifluoromethyl-1H-pyrazole-4-yl, 1-(4-fluoro-phenyl)-3,5-dimethyl-1H-pyrazole-4-yl, 1H-benzotriazole-5-yl, 1H-indole-4-yl, 1H-indole-6-yl, 1-isopropyl-2-trifluoromethyl-1H-benzoimidazole-5-yl, 1-methyl-3-oxo-1,2,3,4-tetrahydro-quinoxaline-6-yl, 1-phenyl-5-trifluoromethyl-1H-pyrazole-4-yl, 2-(2-hydroxy-pyridin-4-yl)-1H-benzoimidazole-5-yl, 2-(4-cyano-

phenyl)-1H-benzoimidazole-5-yl, 2,4-dimethyl-oxazole-5-yl, 2,4-dimethyl-pyrimidine-5-yl, 2,4-dimethyl-thiazole-5-yl, 2,5-dimethyl-1H-pyrrole-3-yl, 2,5-dimethyl-1-phenyl-1H-pyrrole-3-yl, 2,5-dimethyl-1-pyridin-4-ylmethyl-1H-pyrrolyl, 2,5-dimethyl-2H-pyrazole-3-yl, 2,6-dichloro-pyrid-3-yl, 2,6-dimethoxy-pyrid-3-yl, 2,6-dimethyl-pyrid-3-yl, 2-amino-4,6-dimethyl-pyrid-3-yl, 2-amino-6-chloro-pyrid-3-yl, 2-amino-pyrid-3-yl, 2-chloro-6-methyl-pyrid-3-yl, 2-chloro-pyrid-4-yl, 2-cyclopropyl-4-methyl-thiazole-5-yl, 2-dimethylamino-4-methyl-thiazole-5-yl, 2-dimethylamino-pyrid-4-yl, 2-ethyl-5-methyl-2H-pyrazole-3-yl, 2-hydroxy-6-methyl-pyrid-3-yl, 2-methyl-1H-benzoimidazole-5-yl, 2-methyl-3H-benzoimidazole-5-yl, 2-methyl-pyrid-3-yl, 2-methyl-6-trifluoromethyl-pyrid-3-yl, 2-methyl-thiazole-5-yl, 2-morpholin-4-yl-pyridin-4-yl, 2-morpholin-4-yl-pyrimidine-5-yl, 2-pyrrolidin-1-yl-pyridin-4-yl, 3,5-dimethyl-1H-pyrazole-4-yl, 3-amino-5,6-dimethyl-pyrazine-2-yl, 3-amino-5-methyl-pyrazine-2-yl, 3-amino-pyrazine-2-yl, 3-dimethylamino-4-methyl-phenyl, 3-dimethylamino-phenyl, 3H-benzoimidazole-5-yl, 1H-benzoimidazole-5-yl, 3-methanesulfonylamino-2-methyl-phenyl, 3-methanesulfonylamino-phenyl, 3-methyl-isoxazole-4-yl, 3-morpholin-4-yl-phenyl, 3-piperidin-1-yl-phenyl, 3-pyrrolidin-1-yl-phenyl, 4-(2,2,2-trifluoro-ethoxy)-phenyl, 4,6-dimethyl-pyrid-3-yl, 4-amino-2-ethylsulfanyl-pyrimidine-5-yl, 4-amino-2-methyl-pyrimidine-5-yl, 4-chloro-3-methanesulfonylamino-phenyl, 4-chloro-3-sulfamoyl-phenyl, 4-methyl-3-methylamino-phenyl, 4-methyl-thiazole-5-yl, pyridine-2-yl, 5,6,7,8-tetrahydro-quinoline-3-yl, 5-amino-1-phenyl-1H-pyrazole-4-yl, 5-methanesulfonyl-2-methyl-phenyl, 5-methyl-1-phenyl-1H-pyrazole-4-yl, 5-methyl-isoxazole-3-yl, 5-methyl-pyrid-3-yl, 5-methyl-pyrazine-2-yl, 6-chloro-pyrid-3-yl, 6-cyano-pyrid-3-yl, 6-dimethylamino-pyrid-3-yl, 6-ethynyl-pyrid-3-yl, 6-methoxymethyl-pyrid-3-yl, 6-methoxy-pyrid-3-yl, 6-methyl-2-methylamino-pyrid-3-yl, 6-methylamino-pyrazine-2-yl, 6-methyl-pyrid-3-yl, 6-morpholin-4-yl-pyrid-3-yl, 6-pyrrolidin-1-yl-pyrid-3-yl, imidazo[1,2-a]pyridine-2-yl, 6-trifluoromethyl-pyrid-3-yl, and pyrimidine-4-yl.

6. An acylated 6,7,8,9-tetrahydro-5H-benzocycloheptenyl amine in any of its stereoisomeric forms or a mixture thereof in any ratio or a pharmaceutically acceptable salt thereof according to claim 1, selected from the group consisting of:

2,5-dimethyl-1-pyridin-4-ylmethyl-1H-pyrrole-3-carboxylic acid (6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-amide, 5-methyl-1-phenyl-1H-pyrazole-4-carboxylic acid (6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-amide, 1H-indole-6-carboxylic acid (6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-amide, 5-methyl-pyrazine-2-carboxylic acid (6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-amide, 2-methyl-3H-benzoimidazole-5-carboxylic acid (6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-amide, 2-methyl-1H-benzoimidazole-5-carboxylic acid (6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-amide, 2-amino-6-chloro-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-nicotinamide, N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-4-(2,2,2-trifluoro-ethoxy)-benzamide, 6-pyrrolidin-1-yl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-nicotinamide, 6-methyl-2-methylamino-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-nicotinamide, 3-amino-5,6-dimethyl-pyrazine-2-carboxylic acid (6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-amide, 4-fluoro-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-benzamide, 3-pyrrolidin-1-yl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-benzamide, 2,4-dimethyl-thiazole-5-carboxylic acid (6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-amide, 2-amino-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-nicotinamide, 2,6-dimethyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-nicotinamide, 3-amino-5-methyl-pyrazine-2-carboxylic acid (6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-amide, and 3-amino-pyrazine-2-carboxylic acid (6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-amide.

7. A method of stimulating the expression of endothelial NO-synthase in a mammal, which method comprises administering to said mammal a physiologically active amount of a compound as

defined in claim 1 in any of its stereoisomeric forms or a mixture thereof in any ratio or a pharmaceutically acceptable salt thereof.

8. A method of stimulating the expression of endothelial NO-synthase in a mammal, which method comprises administering to said mammal a physiologically active amount of a compound as defined in claim 2 in any of its stereoisomeric forms or a mixture thereof in any ratio or a pharmaceutically acceptable salt thereof.

9. A method of stimulating the expression of endothelial NO-synthase in a mammal, which method comprises administering to said mammal a physiologically active amount of a compound as defined in claim 3 in any of its stereoisomeric forms or a mixture thereof in any ratio or a pharmaceutically acceptable salt thereof.

10. A method of stimulating the expression of endothelial NO-synthase in a mammal, which method comprises administering to said mammal a physiologically active amount of a compound as defined in claim 4 in any of its stereoisomeric forms or a mixture thereof in any ratio or a pharmaceutically acceptable salt thereof.

11. A method of stimulating the expression of endothelial NO-synthase in a mammal, which method comprises administering to said mammal a physiologically active amount of a compound as defined in claim 5 in any of its stereoisomeric forms or a mixture thereof in any ratio or a pharmaceutically acceptable salt thereof.

12. A method of stimulating the expression of endothelial NO-synthase in a mammal, which method comprises administering to said mammal a physiologically active amount of a compound as defined in claim 6 in any of its stereoisomeric forms or a mixture thereof in any ratio or a pharmaceutically acceptable salt thereof.

13. A method according to any one of claims 7 to 12 wherein said mammal is a human.

14. A method for treating a mammal suffering from a disease selected from the group consisting of cardiovascular diseases, stable or unstable angina pectoris, coronary heart disease, Prinzmetal angina, acute coronary syndrome, heart failure, myocardial infarction, stroke, thrombosis, peripheral artery occlusive disease, endothelial dysfunction, atherosclerosis, restenosis, endothelial damage after PTCA, hypertension, essential hypertension, pulmonary hypertension, secondary hypertension, renovascular hypertension, chronic glomerulonephritis, erectile dysfunction, ventricular arrhythmia, diabetes, diabetes complications, nephropathy, retinopathy, angiogenesis, asthma bronchiale, chronic renal failure, cirrhosis of the liver, osteoporosis, restricted memory performance, a restricted ability to learn and for the lowering of cardiovascular risk of postmenopausal women and after intake of contraceptives comprising administering to said mammal a physiologically active amount of a compound as defined in claim 1 in any of its stereoisomeric forms or a mixture thereof in any ratio or a pharmaceutically acceptable salt thereof.

15. A method for treating a mammal suffering from a disease selected from the group consisting of cardiovascular diseases, stable or unstable angina pectoris, coronary heart disease, Prinzmetal angina, acute coronary syndrome, heart failure, myocardial infarction, stroke, thrombosis, peripheral artery occlusive disease, endothelial dysfunction, atherosclerosis, restenosis, endothelial damage after PTCA, hypertension, essential hypertension, pulmonary hypertension, secondary hypertension, renovascular hypertension, chronic glomerulonephritis, erectile dysfunction, ventricular arrhythmia, diabetes, diabetes complications, nephropathy, retinopathy, angiogenesis, asthma bronchiale, chronic renal failure, cirrhosis of the liver, osteoporosis, restricted memory performance, a restricted ability to learn and for the lowering of cardiovascular risk of postmenopausal women and after intake of contraceptives comprising administering to said mammal a physiologically active amount of a

compound as defined in claim 2 in any of its stereoisomeric forms or a mixture thereof in any ratio or a pharmaceutically acceptable salt thereof.

16. A method for treating a mammal suffering from a disease selected from the group consisting of cardiovascular diseases, stable or unstable angina pectoris, coronary heart disease, Prinzmetal angina, acute coronary syndrome, heart failure, myocardial infarction, stroke, thrombosis, peripheral artery occlusive disease, endothelial dysfunction, atherosclerosis, restenosis, endothelial damage after PTCA, hypertension, essential hypertension, pulmonary hypertension, secondary hypertension, renovascular hypertension, chronic glomerulonephritis, erectile dysfunction, ventricular arrhythmia, diabetes, diabetes complications, nephropathy, retinopathy, angiogenesis, asthma bronchiale, chronic renal failure, cirrhosis of the liver, osteoporosis, restricted memory performance, a restricted ability to learn and for the lowering of cardiovascular risk of postmenopausal women and after intake of contraceptives comprising administering to said mammal a physiologically active amount of a compound as defined in claim 3 in any of its stereoisomeric forms or a mixture thereof in any ratio or a pharmaceutically acceptable salt thereof.

17. A method for treating a mammal suffering from a disease selected from the group consisting of cardiovascular diseases, stable or unstable angina pectoris, coronary heart disease, Prinzmetal angina, acute coronary syndrome, heart failure, myocardial infarction, stroke, thrombosis, peripheral artery occlusive disease, endothelial dysfunction, atherosclerosis, restenosis, endothelial damage after PTCA, hypertension, essential hypertension, pulmonary hypertension, secondary hypertension, renovascular hypertension, chronic glomerulonephritis, erectile dysfunction, ventricular arrhythmia, diabetes, diabetes complications, nephropathy, retinopathy, angiogenesis, asthma bronchiale, chronic renal failure, cirrhosis of the liver, osteoporosis, restricted memory performance, a restricted ability to learn and for the lowering of cardiovascular risk of postmenopausal women and after intake of

contraceptives comprising administering to said mammal a physiologically active amount of a compound as defined in claim 4 in any of its stereoisomeric forms or a mixture thereof in any ratio or a pharmaceutically acceptable salt thereof.

18. A method for treating a mammal suffering from a disease selected from the group consisting of cardiovascular diseases, stable or unstable angina pectoris, coronary heart disease, Prinzmetal angina, acute coronary syndrome, heart failure, myocardial infarction, stroke, thrombosis, peripheral artery occlusive disease, endothelial dysfunction, atherosclerosis, restenosis, endothelial damage after PTCA, hypertension, essential hypertension, pulmonary hypertension, secondary hypertension, renovascular hypertension, chronic glomerulonephritis, erectile dysfunction, ventricular arrhythmia, diabetes, diabetes complications, nephropathy, retinopathy, angiogenesis, asthma bronchiale, chronic renal failure, cirrhosis of the liver, osteoporosis, restricted memory performance, a restricted ability to learn and for the lowering of cardiovascular risk of postmenopausal women and after intake of contraceptives comprising administering to said mammal a physiologically active amount of a compound as defined in claim 5 in any of its stereoisomeric forms or a mixture thereof in any ratio or a pharmaceutically acceptable salt thereof.

19. A method for treating a mammal suffering from a disease selected from the group consisting of cardiovascular diseases, stable or unstable angina pectoris, coronary heart disease, Prinzmetal angina, acute coronary syndrome, heart failure, myocardial infarction, stroke, thrombosis, peripheral artery occlusive disease, endothelial dysfunction, atherosclerosis, restenosis, endothelial damage after PTCA, hypertension, essential hypertension, pulmonary hypertension, secondary hypertension, renovascular hypertension, chronic glomerulonephritis, erectile dysfunction, ventricular arrhythmia, diabetes, diabetes complications, nephropathy, retinopathy, angiogenesis, asthma bronchiale, chronic renal failure, cirrhosis of the liver, osteoporosis, restricted memory performance, a restricted ability

to learn and for the lowering of cardiovascular risk of postmenopausal women and after intake of contraceptives comprising administering to said mammal a physiologically active amount of a compound as defined in claim 6 in any of its stereoisomeric forms or a mixture thereof in any ratio or a pharmaceutically acceptable salt thereof.

20. A method according to any one of claims 14 to 19 wherein said mammal is a human.

21. A method according to only one of claims 14 to 19 wherein the disease is selected from the group consisting of endothelial dysfunction, hypertension, coronary heart disease, stable angina pectoris, diabetes complications and atherosclerosis.

22. A pharmaceutical preparation comprising an effective dose of at least one compound of the formula (I) as defined in claim 1 in any of its stereoisomeric forms or a mixture thereof in any ratio and/or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier.

23. A pharmaceutical preparation according to claim 22, which pharmaceutical preparation is in the form of a pill, tablet, lacquered tablet, sugar-coated tablet, granule, hard or soft gelatin capsule, aqueous, alcoholic or oily solution, syrup, emulsion or suspension, suppository, solution for injection or infusion, ointment, tincture, spray, transdermal therapeutic systems, nasal spray, aerosol mixture, microcapsule, implant or rod.